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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,438	04/20/2001	Igor Pankovcin	206582	1728

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EXAMINER
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PESIN, BORIS M

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/839,438

Applicant(s)

PANKOVICIN, IGOR

Examiner

Boris Pesin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-44 is/are allowed.
- 6) ☒ Claim(s) 27-34 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Response to Amendment*

This communication is responsive to the amendment filed 03/25/2005.

Claims 27-45 are pending in this application. Claims 27, 35, 44, and 45 are independent claims. In the amendment filed 03/25/2005, claims 1-26 were canceled and claims 27-45 were added as new. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 27, 30, 32, 33, 34, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pajak (US 5065347) in view of Halstead, JR et al. (US 6670969).

In regards to claim 27, Pajak teaches a method for presenting hierarchical categorized directory information via a plurality of arranged visual elements on a computer-enabled user interface, wherein visual elements represent directory system entities and the arrangement of elements represents the interrelationships of the corresponding directory system entities, the method comprising: displaying one or more elements representing one or more directory system entities (Figures 5, 6, and 8); receiving a user selection of a displayed element (Figures 5, 6, and 8). Pajak does not specifically teach using multiple threads and using a second thread to retrieve data associated with the selected displayed element while others of the displayed plurality of arranged visual elements remain responsive to initiate further data retrieval while the data associated with the initially selected displayed element is being retrieved.

Halstead teaches, "Graphical User Interfaces ("GUI") are created and controlled by computer software programs. It is frequently useful to have more than one active thread within a program manipulating an interactive graphical user interface. A principal reason for constructing multiple threads in a computer software program is the desire for the graphical user interface, or portions of it, to remain responsive, even if one or more threads within the program are busy carrying out other tasks (e.g., computations)." (Halstead, Column 4, Line 64). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pajak with the teachings of Halstead and include multiple thread functionality with the motivation to improve performance and responsiveness (Halstead, Column 1, Line 15).

In regards to claim 30, Pajak and Halstead teach all the limitations of claim 27. They do not specifically teach a method wherein the retrieved data is stored in a cache, the method further comprising obtaining the data from the cache for display on a user interface. However this feature is inherent in Pajak and Halstead since all data is at one point stored in cache.

In regards to claim 32, Pajak and Halstead teach all the limitations of claim 27. They further teach a method wherein the displayed elements are arranged as nodes of a graphical hierarchy (Pajak, Figure 5).

In regards to claim 33, Pajak and Halstead teach all the limitations of claim 27. They further teach a method wherein the graphical hierarchy is a tree (Pajak, Figure 5).

In regards to claim 34, Pajak and Halstead teach all the limitations of claim 27. They further teach receiving a user request for cancellation of the data retrieval; and in response to the user request, canceling retrieval of the data associated with the selected displayed element (Halstead, "in a typical Web browser it is desirable for the "Stop" button to remain responsive even while an HTML page is being loaded, such that the user can interrupt the loading operation without waiting for it to finish." Column 5, Line 5).

Claim 45 is in the same scope as claim 27; therefore it is rejected under similar rationale.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pajak (US 5065347) in view of Halstead, JR et al. (US 6670969) in further view of Dorn et al. (US 6012081).

In regards to claim 28, Pajak and Halstead teach all the limitations of claim 27. They further teach placing a request for retrieval of the data associated with the selected displayed element in a queue ("threads ... communicate using "mailboxes" or event queues" Halstead Column 7, Line 55). They do not specifically teach processing the request from the queue asynchronously with respect to the displaying step. Dorn teaches, "The user specified function will be invoked in a thread asynchronously to the thread that has submitted this function. The execution state is monitored automatically and can be queried at any time." (Column 9, Line 42). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pajak, and Halstead with the teachings of Dorn and include the functionality of asynchronous thread with the motivation to increase the overall speed of the system.

In regards to claim 29, Pajak, Halstead, and Dorn teach the method of claim 27, wherein the first thread is a main thread and the second thread is a worker thread executing asynchronously with respect to the main thread ("The user specified function will be invoked in a thread asynchronously to the thread that has submitted this function. The execution state is monitored automatically and can be queried at any time." Dorn, Column 9, Line 42).

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KL Claim<sup>is</sup> 31 ~~are~~ rejected under 35 U.S.C. 103(a) as being unpatentable over Pajak (US 5065347) in view of Halstead, JR et al. (US 6670969) in further view of Wolfe (US 6604103).

In regards to claim 31, Pajak and Halstead teach all the limitations of claim 27. They do not specifically teach, receiving a user request to display a partially retrieved portion of the data; in response to the user request, obtaining the partially retrieved portion from the cache; and displaying the partially retrieved portion of the data. Wolfe teaches, "If it has been only partially preloaded, the partially preloaded version is retrieved from local storage (620), and any portion not in local storage is retrieved from the network (622), and then rendered on the display (616)." (Column 16, Line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pajak and Halstead with the teachings of Wolfe and include a method of displaying partially retrieved data with the motivation to provide the user with faster access to the data.

### ***Allowable Subject Matter***

Claims 35-44 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art does not specifically teach displaying the plurality of arranged visual elements on the user interface via a first thread, receiving a user selection of a plurality of the elements, receiving a user request to boost the priority of a particular selected element; and in response to receiving the user request, boosting the priority of the particular selected element, wherein the plurality of elements represent directory system entities and the arrangement of the elements represents the interrelationships of the corresponding directory system entities; in combination with all of the other claim limitations.

### ***Response to Arguments***

Applicant's arguments with respect to claims 27-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the



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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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